

REMARKS/ARGUMENT

Claims 1-14 are pending in the application.

Attachment A is a Declaration under 37 CFR §1.132, made by inventor Lumin Li. The Declaration was submitted in connection with US Patent Application Serial No., 09/611,037, the parent case of the instant application. The Declaration is applicable to the instant application for at least the same reasons that it is applicable to the parent application.

Rejections under 35 USC §103

Claims 1-14 were rejected under 35 USC §103(a) as being unpatentable over Tomita et al. (US Patent No. 5,593,540) in view of Chang et al. (US Patent No. 4,854,263). The rejection is traversed, and Applicants request reconsideration.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references when combined must teach or suggest all the claim limitations. (MPEP §2143). Applicants respectfully submit the Office has failed to establish a *prima facie* case of obviousness.

In independent claims 1 and 5, Applicants have claimed a “plurality of electrode openings being configured to define the second surface which is located over the substrate location, the second surface having a surface area that is larger than a surface area of the substrate location,” and a “second surface being defined by inner surfaces of the plurality of electrode openings so that a surface area of the second surface is larger than a surface area of the electrode body without the plurality of electrode openings.” As illustrated in Figure 4 of the Tomita et al. reference, the reference patent teaches gas feed or cooling plate holes 55a are larger than electrode opening or cathode plate holes 55b, and further, cathode plate holes 55b are shown to have essentially vertical or sheer walls. Therefore, the reference does not teach a second surface having a surface area that is

larger than a surface area over the substrate location, or a surface area of the second surface that is larger than a surface area of the electrode body without the plurality of electrode openings.

Although the Office has cited to Chang et al. as a secondary reference teaching “electrode openings that are greater than gas feed hole diameters,” the combination fails for at least the reason that it renders the original Tomita et al. apparatus unsatisfactory for its intended purpose. See MPEP §2143.01. As described in Tomita et al. at col. 5, line 14 - col. 9, line 10, the proposed modification of the reference would eliminate the purpose and benefit disclosed by Tomita et al. And, as described in Appendix A, the claimed structure and resulting function of the present invention is antithetical to the stated design goals of Tomita et al.

In independent claims 9 and 13, Applicants claim “the second plasma sheath surface being at least partially within the plurality of electrode openings,” and “a plasma sheath having a surface that is at least partially within each electrode opening.” As above in reference to claims 1 and 5, Tomita et al. specifically teach away from this condition. Again, see Tomita et al., col. 5, line 14 – col. 9, line 10. The asserted combination would result in the Tomita et al. apparatus being rendered unsatisfactory for its intended purpose. Regarding the claim of inherency attributed to the Tomita et al. apparatus, the Office is simply mistaken. See Tomita et al., col. 5, line 14 – col. 9, line 10, and Appendix A.


For at least the above reasons, Applicants submit that independent claims 1, 5, 9, and 13 are patentable under 35 USC §103(a) over Tomita et al. in view of Chang et al. Dependent claims 2-4, 6-8, 10-12, and 14 are patentable for at least the same reasons. Applicants therefore respectfully request that the rejections be withdrawn.

In view of the foregoing, Applicants respectfully request reconsideration of claims 1-14. Applicants submit that all claims are in condition for allowance. Accordingly, a notice of allowance is respectfully requested. If Examiner has any questions concerning the present Amendment, the Examiner is kindly requested to contact the undersigned at (408) 749-6900, ext. 6905. If any additional fees are due in

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Amdt. dated December 21, 2004
Reply to Office Action of September 21, 2004

connection with filing this amendment, the Commissioner is also authorized to charge
Deposit Account No. 50-0805 (Order No. LAM1P077A2). A copy of the transmittal is
enclosed for this purpose.

Respectfully submitted,
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